GEGELIA, T.G.

I.I. Privalov's basic lemma for space potentials. Soob. AN Grus.SSR 18 no.3:257-264 Mr '57. (MIRA 10:7)

1. Akademiya nauk Gruzinskoy SSR, Tbilisskiy matematicheskiy institut imeni A.M. Razmadze.
(Potential, Theory of)

GEGELIA, T.G.

Properties of certain classes of coninuous functions associated with Hilbert transforms in E^n. Soob. AN Gruz. SSR 19 no.3:257-261 S '57. (MIRA 11:5)

1. Akademiya nauk Gruzinskoy SSR, Tbilisskiy matematicheskiy institut im. A.M. Razmadze. Predstavleno chlenom-korrespondentom Akademii N.P. Vekua.

(Functions, Continuous)

GEGELIA, T.G.

Beundedness of singular operaters. Soob. AN Gruz.SSR 20 no.5: 517-523 My '58. (MIRA 11:10)

1. AN GruzSSR, Tbilisskiy matematicheskiy institut im. A.M. Razmadze. Predstavleno chlenom-korrespondentom Akademii N.P.Vekua. (Operators (Mathematics))

GEGELIA, T.G.

Behavior of generalized potential near the boundary of an integration set. Trudy Mat.inst.AN Gruz.SSR 26:189-193 '59. (MIRA 13:6)

(Functions, Analytic)

29861
S/044/61/000/007/034/055
C111/C222

16.2600 16.3500

AUTHOR: Gegelia, T.G.

TITLE: Differential properties of some integral manifolds

PERIODICAL: Referativnyy zhurnal, Matematika, no. 7, 1961, 79, abstract 7 B 388. ("Tr. Tbilissk. matem. in-ta. AN Gruz SSR", 1959, 26, 195-225)

TEXT: Let $P(x_1, x_2, \ldots, x_n)$, $Q(y_1, y_2, \ldots, y_n)$ be points of the n-dimensional space E^n, $r(P,Q)$ be the distance between P and Q ; Q be the unit vector of Q in the direction P ; $\Omega(\theta)$ be a continuous function the integral over the unit sphere of which is equal to zero: $\int_\sigma \Omega(\theta) d\sigma = 0$. In the paper the author gives a number of results on the differential properties of the function

$$\varphi(P) = \int_{E^n} \frac{\Omega(\theta) K(P,Q)}{r^n(P,Q)} f(Q) dQ \qquad (1)$$

Card 1/5

in dependence on the differential properties of $f(Q)$ and under certain restrictions for the kernel $K(P,Q)$. As an example we give a theorem for which we premise the following definitions: It holds $K(P,Q) \in T$ if in every bounded closed set D' it holds uniformly with respect to P:

$$\lim_{\delta \to 0} \int_{\sigma(P,\delta)} \frac{K(P,Q) - K(P,P)}{r^n(P,Q)} dQ = 0 ;$$

4

here $\sigma(P,\delta)$ is the sphere with the radius δ and the center P. It holds $K(P,Q) \in L_{p,\alpha}$ $(p > 0, \alpha \geq 0)$ if $K(P,Q)$ is measurable in Q for every P and if for every bounded set D' there exists a constant $c = c(D', p)$ so that for $P \in D'$ it holds :

$$\left\{ \int_{E^n} \frac{|K(P,Q)|^p}{1+r^{\alpha}(0,Q)} dQ \right\}^{1/p} \leq c .$$

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000514610008-6"

29861
S/044/61/000/007/034/055
C111/C222

Differential properties of some ...

It holds $K(P,Q) \in A^{\nu}_{p,\alpha}$ if $K(P,Q) \in T \cap L_{p,\alpha}$ and if for every bounded set D' there exists an increasing function $\nu(t)$ so that $\lim_{t \to 0} \nu(t) = 0$ and

$$\sup_{P_1,P_2 \in D', r(P_1,P_2) < \delta} |K(P_1,Q) - K(P_2,Q)| \leq \nu(\delta) F(Q)$$

where $F(Q) \in L_{p,\alpha}$. Let $i_1, \ldots, i_m$ $(1 \leq i_k \leq n)$ be integers, and let :

$$[H(P,Q)]^{[k]} = \frac{\partial}{\partial x_{i_k}} [H(P,Q)]^{[k-1]} + \frac{\partial}{\partial y_{i_k}} [H(P,Q)]^{[k-1]} \tag{2}$$

$$[H(P,Q)]^{[0]} = H(P,Q) \quad (k = 1,2,\ldots,m)$$

Theorem : If the functions $K(P,Q)$, $[K(P,Q)]^{[1]}$, ..., $[K(P,Q)]^{[m]}$ belong to the class $A^{\nu}_{q,n}$, and the functions

Card 3/5

$$f(P)\ ,\ \frac{\partial f(P)}{\partial x_{i_1}}\ ,\dots,\ \frac{\partial^m f(P)}{\partial x_{i_1}\dots\partial x_{i_m}}$$

belong to the class $L_{p,n}\cap T$ $(p>1\ ,\ ^1/p+{}^1/q=1)$ then the function $\varphi(P)$ defined by (1) is existing and continuous on E^n , there exist its continuous partial derivatives

$$\frac{\partial\varphi(P)}{\partial x_{i_1}}\ ,\ \dots\ ,\ \frac{\partial^m\varphi(P)}{\partial x_{i_1}\dots\partial x_{i_m}}$$

and

$$\frac{\partial^k\varphi(P)}{\partial x_{i_1}\dots\partial x_{i_k}}=\int_{E^n}\frac{\Omega(\theta)}{r^n(P,Q)}\left[K(P,Q)f(Q)\right]^{[k]}\,dQ\ ,\qquad (k=0,\dots,m)$$

44

29861
S/044/61/000/007/034/055
C111/C222

Differential properties of some ...

where $[K(P,Q)]^{[k]}$ is calculated with $H = Kf$ according to the formula (2). Other analogous theorems are proved.

[Abstracter's note : Complete translation.]

4

Card 5/5

89008

S/020/60/135/004/001/037
C111/C222

16.5600
16.4500

AUTHOR: Gegelia, T.G.

TITLE: Composition of Singular Kernels

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol.135, No.4, pp.767-770

TEXT: Let x, y, t, x', y',... be points of the Euclidean E_{m+1}; $r(x,y)$ be the distance between x and y; $\varrho_x(y,t) = \min\{r(x,y), r(x,t)\}$. c denotes constants independent of the principal variables. Let S be a closed m-dimensional Lyapunov surface in E_{m+1}. On (S,S) let functions $K_1(x,y)$ and $K_2(x,y)$ be defined being continuous on (S,S) with a possible exception of the points (x,x) and satisfying the following conditions:

1°. $|K_1(x,y)| \leqslant \xi_1(r(x,y))$, $|K_2(x,y)| \leqslant \xi_2(r(x,y))$.

2°. $|K_1(x,y')-K_1(x,y'')| \leqslant \zeta_1(r(y',y''))\mu_1(\varrho_x(y',y''))$.

3°. $|K_2(x',y)-K_2(x'',y)| \leqslant \zeta_2(r(x',x''))\mu_2(\varrho_y(x',x''))$.

Here $\xi_1(\tau)$, $\xi_2(\tau)$, $\mu_1(\tau)$, $\mu_2(\tau)$ are decreasing functions and $\zeta_1(\tau)$, $\zeta_2(\tau)$

Card 1/8

89008

S/020/60/135/004/001/037
C111/C222

Composition of Singular Kernels

are increasing functions on $(0,\infty)$. Let furthermore exist matrices $\|A_{i,j}^{(1)}(x)\|$ and $\|A_{i,j}^{(2)}(x)\|$ continuous on S so that the quadratic forms

$$\sum_{i,j=1}^{m+1} A_{i,j}^{(1)}(x)\tau_i\tau_j, \qquad \sum_{i,j=1}^{m+1} A_{i,j}^{(2)}(x)\tau_i\tau_j$$

are positive definite on S, and for every $x \in S$ there exist the limit values

$$4^\circ. \quad \lim_{\varepsilon\to 0} \int_{S_1(\varepsilon;x)} K_1(x,y)dS_y = \int_S K_1(x,y)dS_y .$$

$$5^\circ. \quad \lim_{\varepsilon\to 0} \int_{S_2(\varepsilon;x)} K_2(y,x)dS_y = \int_S K_2(y,x)dS_y .$$

Card 2/8

89008

S/020/60/135/004/001/037
C111/C222

Composition of Singular Kernels

Here dS_y is the surface element of S in the point y; $S_k(\mathcal{E},x) = S-S_k(x;\mathcal{E})$ $(k=1,2)$; $S_k(x;\mathcal{E})$ are the sets of those points $y \in S$ for which $\sigma_k(x,y)<\mathcal{E}$, where

$$\sigma_k^2(x,y) = \sum_{i,j=1}^{m+1} A_{i,j}^{(k)}(x)(x_i-y_i)(x_j-y_j).$$

The composition of the kernels $K_1(x,y)$ and $K_2(x,y)$ now is defined by

$$(1)\qquad K(x,y) = \int_S K_1(x,t)K_2(t,y)dS_t,$$

where

$$\int_S K_1(x,t)K_2(t,y)dS_t = \lim_{\mathcal{E},\delta\to 0} \int_{S(\mathcal{E},\delta)} K_1(x,t)K_2(t,y)dS_t,$$

$$S(\mathcal{E},\delta) = S_1(\mathcal{E};x)\cap S_2(\delta;y).$$

Theorem 1: If $K_1(x,y)$, $K_2(x,y)$ satisfy the conditions 1°-5° then the

Card 3/8

89008

S/020/60/135/004/001/037
C111/C222

composition $K(x,y)$ of these kernels defined by (1) is continuous on (S,S) with a possible exception of the points (x,x), and, in the neighborhood of these points, it admits the estimation

$$(2)\qquad c\,|K(x,y)| \leqslant \mu_1(r)\int_0^r \tau^{m-1}\xi_2(\tau)\zeta_1(\tau)d\tau + \mu_2(r)\int_0^r \tau^{m-1}\xi_1(\tau)\zeta_2(\tau)d\tau +$$

$$+\int_r^c \tau^{m-1}\xi_1(\tau)\xi_2(\tau)d\tau + \xi_1(r)\eta_2(r) + \xi_2(r)\eta_1(r),$$

where $r = cr(x,y)$ and $\eta_1(\tau)$, $\eta_2(\tau)$ are increasing functions on $(0,\infty)$ which are chosen so that

$$\Big|\int\limits_{S_1(x;\varepsilon)} K_1(x,y)dS_y\Big| \leqslant \eta_1(\varepsilon), \qquad \Big|\int\limits_{S_2(x;\varepsilon)} K_2(y,x)dS_y\Big| \leqslant \eta_2(\varepsilon).$$

Let $K_1(x,y)$ additionally satisfy the conditions

Card 4/8

89008

S/020/60/135/004/001/037
C111/C222

Composition of Singular Kernels

6°. $|K_1(x',y)-K_1(x'',y)| \leq \zeta_3(r(x',x''))\mu_3(\varrho_y(x',x''))$.

7°. $\left|\int_{S_1(x;\varepsilon)}[K_1(x,t)-K_1(y,t)]dS_t\right| \leq \nu_1(r(x,y))\nu_2(\varepsilon)$.

Here $\zeta_3(\tau)$ and $\nu_1(\tau)$ are increasing functions and $\mu_3(\tau)$ and $\nu_2(\tau)$ are decreasing functions on $(0,\infty)$; $r(x,y) \leq c\varrho$.

Theorem 2: If $K_1(x,y)$, $K_2(x,y)$ satisfy the conditions 1°-7° then for $\varrho \geq r$ it holds:

Card 5/8

89008

S/020/60/135/004/001/037
C111/C222

Composition of Singular Kernels

$$c\left|K(x',y)-K(x'',y)\right| \leqslant \nu_1(r)\nu_2(\varrho)\xi_1(\varrho)+\zeta_2(r)\eta_1(r)\mu_2(\varrho)+\zeta_3(r)\eta_2(r)\mu_3(\varrho)+$$

$$+\mu_2(\varrho)\int_0^r \tau^{m-1}\zeta_1(\tau)\zeta_2(\tau)d\tau+\zeta_3(r)\mu_2(\varrho)\int_r^{\varrho}\tau^{m-1}\mu_3(\tau)\zeta_2(\tau)d\tau+$$

$$+\mu_1(\varrho)\int_0^r \tau^{m-1}\zeta_1(\tau)\xi_2(\tau)d\tau+\zeta_3(r)\mu_3(\varrho)\int_0^{\varrho}\tau^{m-1}\zeta_2(\tau)d\tau+$$

$$+\zeta_3(r)\int_{\varrho}^{c}\tau^{m-1}\mu_3(\tau)\xi_2(\tau)d\tau,$$

for $\varrho < r$ it holds:

Card 6/8

89008

S/020/60/135/004/001/037
C111/C222

Composition of Singular Kernels

$$c\,|K(x',y)-K(x'',y)| \leq \xi_2(\varrho)\eta_1(r)+\xi_1(\varrho)\eta_2(r)+\mu_2(\varrho)\int_0^r \tau^{m-1}\xi_1(\tau)\xi_2(\tau)\,d\tau$$

$$+\mu_1(\varrho)\int_0^{r'}\tau^{m-1}\xi_2(\tau)\xi_1(\tau)\,d\tau+\xi_3(r)\int_\varrho^c \tau^{m-1}\mu_3(\tau)\xi_2(\tau)\,d\tau+\int_\varrho^r \tau^{m-1}\xi_1(\tau)\xi_2(\tau)\,d\tau,$$

where $\varrho = c\varrho_y(x',x'')$.

Similar estimations hold for $|K(x,y')-K(x,y'')|$.
The two theorems form the base for the investigation of integral equations with multiple singular integrals on Lyapunov manifolds and permit a generalization of the results of Giraud (Ref.2) to this case.

Card 7/8

39008

S/020/60/135/004/001/037
C111/C222

Composition of Singular Kernels

Some exceptional cases are considered; especially it is stated that the composition of a quasisingular kernel yields a quasisingular kernel. There are 11 references: 8 Soviet, 1 German, 1 French and 1 Polish.

ASSOCIATION: Tbilisskiy matematicheskiy institut imeni A.M.Razmadze Akademii nauk GruzSSR (Tbilissi Mathematical Institute imeni A.M.Razmadze of the Academy of Sciences Gruzinskaya SSR)

PRESENTED: June 18, 1960, by N.I.Muskhelishvili, Academician

SUBMITTED: June 15, 1960

Card 8/8

16.4610

25773
S/020/61/139/002/003/017
C111/C333

AUTHOR: Gegelia, T. G.

TITLE: Properties of n-dimensional singular integrals in the $L_p(S;\varsigma)$ space

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 139, no. 2, 1961, 279-282

TEXT: Let E_{m+1} be the Euclidean space; x, y, z its points ($x = (x_1, \ldots, x_{m+1})$); $r(x,y)$ -- distance between x and y; $C(z, \delta)$ -- sphere with center z and radius δ; l -- arbitrary straight line through z; $H(l, \delta)$ -- circular cylinder with the axis l, height 2δ, inversion center z, base radius δ.

Let S be a bounded closed m-dimensional mainifold in E_{m+1} with the property: To every $z \in S$ there corresponds a $\delta > 0$ and a system of coordinates $(X_1, \ldots, X_{m+1})$ with origin in z so that the part of S being in $H(X_{m+1}, \delta)$ admits the representation: $\eta_{m+1} = \gamma(\eta_1, \ldots, \eta_m)$, where $\eta_1, \ldots, \eta_{m+1}$ are the coordinates of the point $y \in S \cap H(X_{m+1}, \delta)$

Card 1/8

X

25773

S/020/61/139/002/003/017

Properties of n-dimensional singular... C111/C333

in the system $(X_1, \ldots, X_{m+1})$, while γ is a unique function defined on $\tau(z, \delta)$, where $\tau(z, \delta)$ is the section of $C(z, \delta)$ with the hyperplane through z which is perpendicular to X_{m+1}. Assume that γ possesses continuous partial derivatives of first order in $\tau(z, \delta)$, let $\gamma(0, \ldots, 0) = \partial\gamma(0, \ldots, 0)/\partial\eta_k = 0 (k = 1, \ldots, m)$ and let the $\omega(\partial\gamma/\partial\eta_k, t)t^{-1}$ $(k = 1, \ldots, m)$ be integrable in $(0, 1)$, where ω is the modulus of continuity of $\partial\gamma/\partial\eta_s$ in $\tau(z, \delta)$.

Let an (m+1)-dimensional symmetric matrix $\| A_{ij}(y) \|$ be given on S, where the form $\sum A_{ij}(y)\, t_i t_j$ is assumed to be positive definite in every point $y \in S$ and the $\omega(A_{ij}, t)\, t^{-1}$ $(i, j = 1, \ldots, m+1)$ are assumed to be intregrable in $(0, 1)$.

The operator

Card 2/8

$$K\varphi(x) = \int_S^* k(y,x)\,\varphi(y)\,dS_y.$$

is considered, where

$$k(y,x) = \prod_{i=1}^{m+1}(x_i-y_i)^{\lambda_i}\left[\sigma(y,x)\right]^{-\lambda},\quad \sigma^2(y,x) = \sum_{i,j=1}^{m+1} A_{ij}(y)(x_i-y_i)(x_j-y_j),$$

λ_i $(i = 1, \ldots, m+1)$ and λ are arbitrary nonnegative integers, $\lambda - m - \sum\lambda_i$ a positive odd number, $\varphi(y)$ the density of the integral, dS_y – surface element of S in the point y and

$$\int_S^* k(y,x)\varphi(y)dS_y = \lim_{\sigma\to 0}\int_{S(\sigma,x)} k(y,x)\,\varphi(y)\,dS_y$$

Card 3/8

25773

S/020/61/139/002/003/017
C111/C333

Properties of n-dimensional singular...

where $S(\delta;x) = S - S(x;\delta)$; $S(x;\delta) = S \cap H(n(x);\delta)$; $n(x)$ – normal of S in the point x

The author investigates the boundedness of K_{φ} in the space $L_p(S, \rho)$, where $p > 1$ and $\rho(x)$ is a nonnegative measurable function on S.

Theorem 1: If $\varphi(y) \in L_p(S)$, then K_{φ} is a bounded operator transforming $L_p(S)$ into itself.

Theorem 2: If $f(y) \in L_p(S, \rho(y))$, where $\rho(y) = \prod_{k=1}^{n} r^{\alpha_k}(y, z^{(k)})$, $0 \leq \alpha_k < m(p-1)$ $(k = 0, \ldots, n_1 \leq n)$; $0 < -\alpha_k < m$ $(k = n_1 + 1, \ldots, n)$, $z^{(k)} \in S$, $z^{(i)} \neq z^{(j)}$ $(i \neq j;\ k, i, j = 1, \ldots, n)$; $p > 1$, then the operator K_{φ} transforms the space $L_p(S, \rho(y))$ into itself and is bounded.

Card 4/8

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000514610008-6"

25773
S/020/61/139/002/003/017
Properties of n-dimensional singular... C111/C333

Theorem 3: If $\varphi(y) \in L_p(S, \mu(y))$, where $p > 1$, $\mu(y) = \prod_{k=1}^{n} r^{\gamma_k}(y, z^{(k)})$,
$\gamma_k = \alpha_k(p-1)$ $(k = 1, \ldots, n_1 \leqslant n)$, $\gamma_k = -\alpha_k$ $(k = n_1 + 1, \ldots, n)$,
$0 < \alpha_k < n$, $z^{(k)} \in S$, $z^{(i)} \neq z^{(j)}$ $(i \neq j;\ k, i, j = 1, \ldots, n)$, then the operator

$$L_\varphi(x) = \frac{1}{\mu_*(x)} \int_S k(y, x)\ \mu_*(y)\varphi(y)\ dS_y ,$$

where

$$\mu_*(y) = \prod_{k=1}^{n} r^{\omega_k}(y, z^{(k)}),$$

$\omega_k = \alpha_k$ $(k = 1, \ldots, n_1)$; $\omega^k = -\alpha_k$ $(k = n_1 + 1, \ldots, n)$

is bounded and transforms the space $L_p(S; \mu(y))$ into itself.

Let $k^{(i)}(y, x) = [\varrho(y, x)]^{-m-1} \sum_{k=1}^{m+1} c_k^{(i)}(y)(x_k - y_k)$ $(i = 1, 2)$

Card 5/8

25773

where $C_k^{(i)}(y)$ $(k=1,\ldots,m+1)$ are continuous on S, and $B(z) = \det \| B_{ij}(z) \|_{i,j=1}^{m}$, where $B_{ij}(z) = \sum_{k,l=1}^{m+1} A_{kl}(y)\, a_{ki} a_{lj}$ $(i,j=1,\ldots, m+1)$. Let $b_{ij}(z)$ be the ratio of the algebraic complement of $B_{ij}(z)$ in the determinant B to B itself. Let $d_j^i(z)$ denote the expression $\sum C_k^{(i)}(z)\, a_{kj}$. The a_{kj} are defined by $x_i = z_i + \sum_{j=1}^{m+1} a_{ij} \xi_j$, where $\xi_1, \ldots, \xi_{m+1}$ are the coordinates of the point x in the system $(X_1, \ldots, X_{m+1})$.

Theorem 4: If $\varphi(y) \in L_p(S; \varrho(y))$, where $\varrho(y)$ is the function from theorem 2, then

Card 6/8

25773
S/020/61/139/002/003/017
C111/C333

Properties of n-dimensional singular ...

$$\int_S k^{(1)}(y,z)dS_y \int_S k^{(2)}(x,y)\varphi(x)dS_x = \int_S \varphi(x)dS_x \int_S k^{(1)}(y,z)k^{(2)}(x,y)dS_y -$$

$$- \frac{\Pi^{m+1} \sum_{i,j=1}^{m} b_{ij}(z)\, d_i^{(1)}(z) d_j^{(2)}(z)}{m\Gamma^2\left(\frac{m+1}{2}\right) B(z)} \varphi(z) .$$

The author refers to some possible generalizations of these theorems. He mentions S. G. Mikhlin.

There are 9 Soviet-bloc and 5 non-Soviet-bloc references. The two references to English-language publications read as follows: A. Calderon, A. Zygmund, Am. J. Math., 78, No. 2, 289 (1956); E. Stein, Proc. Am. Math. Soc., 8, No. 2, 250 (1957).

Card 7/8

25773
S/020/61/139/002/003/017
Properties of n-dimensional singular ... C111/C333

ASSOCIATION: Tbilisskiy matematicheskiy institut imeni A. M. Razmadze Akademii nauk Gruz SSR (Tbilisi Institute of Mathematics imeni A. M. Razmadze of the Academy of Sciences Gruzinskaya SSR)

PRESENTED: March 6, 1961, by N. I. Muskhelishvili, Academician

SUBMITTED: March 3, 1961

Card 8/8

32298
S/020/61/141/004/002/019
C111/C222

16.6800 (1024,1121,1329)

AUTHOR: Gegelia, T.G.

TITLE: Integral equations containing integrals extending over a surface with edges

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 141, no. 4, 1961, 773 - 776

TEXT: Let S be a bounded open smooth manifold in the three-dimensional Euclidean space and s be the boundary of S . On $S \times S$ the author defines singular kernels $k(x,y)$ which especially may have the form

$$k(x,y) = \sum_{i=1}^{3} c_i(x,y)\,(x_i - y_i)\,\sigma^{-3}(x,y) + k_1(x,y) ,$$

$$\sigma^2 = \sum_{i,j=1}^{3} A_{ij}(x,y)\,(x_i - y_i)\,(x_j - y_j) , \qquad (2)$$

where $c_i(x,y)$ ($i = 1,2,3$) are given functions on $S \times S$ which satisfy the condition $H(\lambda)$, the $A_{ij}(x,y)$ belong to the class $H(\lambda)$ on $S \times S$,

Card 1/5

32228
S/020/61/141/004/002/019
Integral equations containing integrals ...C111/C222

$\sum A_{ij}(x,y)t_i t_j$ is positive definite for every point $(x,y) \in S \times S$, and nothing is said about $k_1(x,y)$.
[Abstracter's note : There obviously is a misprint and it shall be $k_1(x,y) = O\left[r^{\alpha-2}(x,y)\right]$ uniformly in x,y and besides sufficiently smooth.] The author considers integral equations

4

$$A(\varphi) \equiv a(x)\varphi(x) + \int_S k(x,y)\varphi(y)dS_y = f(x) \quad , \qquad (3)$$

where $a(x)$ and $f(x)$ are given on S, dS_y-- surface element of S, in the point y , $k(x,y)$ is a singular kernel, the integral is understood in the sense of the principal value, $\varphi(y)$ is sought in the class $L_p(S;\nu)(p>1)$ and $\nu(y)$ is a weight function.
For auxiliary purposes the author introduces operators

Card 2/5

32298
S/020/61/141/004/002/019
Integral equations containing integrals .. C111/C222

$$K_{\varphi}(x) = \int_S k(x,y)\varphi(y)dS_y , \quad K_{\varphi}^{\gamma}(x) = \varrho^{-\gamma}(x) \int_S k(x,y)\varrho^{\gamma}(y)\varphi(y)dS_y$$

where γ is an arbitrary real number, $\varrho(x)$ is the distance from x to s, and for y = x the integrals are defined in the sense of the principal value. Basing on the earlier results (Ref. 2 : T.G. Gegelia, DAN 139, no. 2 (1961)) the author shows the existence and boundedness of the operators $K_{\varphi}(x)$ and $K_{\varphi}^{\gamma}(x)$ for almost all $x \in S$. Furthermore : Theorem 4 : If $m(x,y)$ and $k(x,y)$ as well as their composition (Ref. 16. T.G. Gegelia, DAN 135, no. 4,767 (1960)) are singular kernels then for every $\varphi \in L_p(S; \varrho^{\beta})$ $(-1 < \beta < p-1)$ and almost all x of S there holds the formula

$$\int_S m(x,y)\, dS_y \int_S k(y,z)\varphi(z)dS_z = c(x)\varphi(x) + \int_S \varphi(z)dS_z \int_S m(x,y)k(y,z)dS_z ,$$

where c(x) is a certain function not depending on $\varphi(x)$.

Card 3/5

4

32298
S/020/61/141/004/002/019
Integral equations containing integrals .. C111/C222

Then the author considers the exceptional case of (3) with $a(x) = 1$, where $k(x,y)$ is defined by (2) and $f \in L_p(S; \varrho^{\alpha(p-1)})$ $(p > 1,\ 0 < \alpha < 1)$. The function $\varphi(x)$ is sought in the same class. In this case the operator A is denoted with K^o. It is shown that K^o is a Noether-operator in the space $L_p(S, \varrho^{\alpha(p-1)})$, i.e. that the Noether theorems are valid for $K^o \varphi = f$. It is pointed out that this assertion holds also under more general assumptions, e.g. if s is piecewise smooth and the coefficients have certain discontinuities. Finally it is briefly described how (3) can be regularized in $L_p(S, \varrho^{\alpha(p-1)})$ in the general case so that also in the general case the correctness of the Noether theorems can be proved for (3). The author mentions S.G. Mikhlin, S.M. Nikol'skiy, I.Ts. Gokhberg and B.V. Khvedelidze.

There are 15 Soviet-bloc and 4 non-Soviet-bloc references. The reference

Card 4/5

32298
S/020/61/141/004/002/019
Integral equations containing integrals .. C111/C222

to the English-language publication reads as follows : A. Kalderon, A. Zygmund, Am J. Math., 78, no. 2, 289(1956).

ASSOCIATION: Vychislitel'nyy tsentr Akademii nauk Gruz SSR (Computing Center of the Academy of Sciences Gruzinskaya SSR)

PRESENTED: July 6, 1961, by N.I. Muskhelishvili, Academician

SUBMITTED: June 30, 1961

X

Card 5/5

GEGELIA, T.G.

Inversion formula for the order of integration in iterated singular integrals. Trudy Mat. inst. AN Gruz. SSR 28:41-52 '62.
(MIRA 16:8)

(Integrals)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000514610008-6"

ACCESSION NR: AT4044588 S/2683/62/028/000/0053/0072

AUTHOR: Gegelia, T. G.

TITLE: Some fundamental spatial boundary value problems in the theory of elasticity

SOURCE: AN GruzSSR. Matematicheskiy institut. Trudy*, v. 28, 1962, 53-72

TOPIC TAGS: elasticity theory, boundary problem, boundary value problem, spatial boundary problem, elastic oscillation, adjoint integral equation, Fedholm theorem

ABSTRACT: In the mathematical theory of elasticity, planar problems have been extensively studied (by Muskhelishvili, for example) by the methods of complex-variable function theory and the theory of one-dimensional, singular, integral equations. In spatial problems, however, the former methods are inapplicable, but multidimensional, singular, integral equations have been successfully used by V. D. Kupradze. The present paper adds to these results. In the first section, the author derives certain auxiliary formulas. The equilibrium of a homogeneous, elastic, isotropic body is described by the system of differential equations (1)

$$\Delta u+\frac{\lambda+\mu}{\mu}\operatorname{grad}\operatorname{div}u=0,$$

Card 1/4

ACCESSION NR: AT4044588

where u(x) is the displacement vector at the point x in a three-dimensional euclidean space, and λ and μ are the elastic constants. The fundamental matrix of system (1) has the form

$$\Gamma(x, y) = \left\| \left(\lambda_1 \delta_{ij} + \mu_1 \frac{(x_i - y_i)(x_j - y_j)}{r^2(x, y)} \right) \frac{1}{r(x, y)} \right\|_{i,j=1}^{3} \qquad (2)$$

where δ_{ij} is the Kronecker symbol. Then by using a stress operator, a new form of the fundamental matrix is obtained and its properties are studied. In section 2, the author poses boundary-value problems of the theory of elasticity in several forms, and reduces them to equivalent systems of singular, surface integral equations. Let S be a closed, two-dimensional Lyapunov manifold, D^+, a finite region bounded by S, and D^-, the complement of $D^+ \cup S$ with respect to the whole space. A typical problem is: Problem $(w)_f^+$ — To find in D^+ the solution of system (1), represented by the potential $w(\varphi;x)$ with a density φ of class $L^p(S)$ $(p>1)$ under the boundary condition $w^+(\varphi;x) = f(x)$ for almost all x in S, where f(x) is a given function on S of class $L^p(S)$. The equivalent singular integral equation is

$$\mp \varphi(x) + \frac{1}{2\pi} \int_S k(x, y)\varphi(y)\, d_y S = f(x), \qquad (3)$$

Card 2/4

ACCESSION NR: AT4044588

In section 3 it is shown that the obtained systems of integral equations form three pairs of mutually adjoint systems. Thus, the systems $(w)_f^+$ and $(v)_f^-$ (also defined in section 2), considered in spaces $L^p(S)$ and $L^{p'}(S)$, respectively, form a system of adjoint singular integral equations. Similar statements apply to the other problems defined in section 2. Section 4 includes a proof of the validity of Fredholm's theorem for these singular systems. Typically: System $(w)_f^+$ is normally resoluble with a zero index in the space $L^p(S)$. Section 5 is a detailed study of the homogeneous, singular, integral equations. A typical theorem is: The homogeneous system $(w)_0^+$ of singular integral equations has only a trivial solution in the space $L^p(S)$ for any $p>1$. The problems stated in section 2 are then studied in greater detail in section 6. Typically: The boundary value problem $(w)_f^+$ has a unique solution for every f in $L^p(S)$. The interior and exterior boundary-value problems of the theory of elasticity, in their classical form, are discussed in section 7. The paper ends with a brief section 8 devoted to the problem of elastic oscillations. Orig. art. has: 29 numbered formulas.

ASSOCIATION: Tbilisskiy matematicheskiy institut, AN GruzSSR (Tiflis Mathematics Institute, AN GruzSSR)

Card 3/4

ACCESSION NR: AT4044588

SUBMITTED: 30Dec61

SUB CODE: ME, MA

ENCL: 00

NO REF SOV: 012

OTHER: 001

Card 4/4

GAGELIA, T.G.

Regularization of singular integral operators. Trudy Mat. Inst. AN Gruz. SSR 29:229-237 '63. (MIRA 17:12)

BASHELEYSHVILI, M.O.; GEGELIA, T.G.

Fundamental three-dimensional boundary value problems for composite isotropic elastic media. Dokl. AN SSSR 160 no.1:50-53 Ja '65. (MIRA 18:2)

1. Vychislitel'nyy tsentr AN GruzSSR. Submitted June 25, 1964.

VAKHANIYA, Ye.K.; NIKURADZE, G.N.; ABESADZE, D.M.; GEGELIDZE, K.I.

Possible oil and gas occurances in Mesozoic sediments of western Geòrgia. Trudy VNIGNI no.15:66-78 '59. (MIRA 14:6)
(Georgia—Petroleum geology)
(Georgia—Gas, Natural—Geology)

GOGELIYA, T. G.

"Investigation of the 'Tiropol'skiy' type water fence."

Dissertation for Candidate of Technical Sciences, Georgian Industrial Institute, Tbilisi. (GII)

Subject: Hydroengineering building and construction

SO: Gidrotekhnicheskoye, stroitel'stvo, 12, 1946.

SOV/112-59-1-398

8(6), 14(6)

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 1, p 55 (USSR)

AUTHOR: Gegeliya, T. [G-]

TITLE: Water-Power Resources of Gruzinskaya SSR and Prospects for Their Utilization

PERIODICAL: Sakartvelos ekonomisti, 1958, Nr 2, pp 58-67 (Original in Georgian)

ABSTRACT: Bibliographic entry.

Card 1/1

SOV/98-58-12-7/21

AUTHOR: Gegeliya, ~~T. G.,~~ Candidate of Technical Sciences

TITLE: The Trash-Collecting Canal of a Water-Retaining Dam (Nanosoperekhva tyvayushchiy kanal-kollektor vodozabornoy plotiny)

PERIODICAL: Gidrotekhnicheskoye stroitel'stvo, 1958, Nr 12, pp 30 - 32 (USSR)

ABSTRACT: During the last 10-15 years, water-retaining dams containing a water intake canal and a trash collecting canal (0.4 m wide) for the interception of small sized sediments have been used in the construction of small and medium hydroelectric power plants in mountainous districts. Both canals are covered with perforated grates. Trials carried out by the author and others have shown that grates of trapezoidal profile with a circular head posses the greatest permeability. There are 2 sets of diagrams.

Card 1/1

8(6), 14(6) SOV/98-59-9-28/29

AUTHOR: Gegeliya, T.G., Candidate of Technical Sciences

TITLE: Some Results of Work on Cheaper and Faster Construction of Hydropower Plants

PERIODICAL: Gidrotekhnicheskoye stroitel'stvo, 1959, Nr 9, pp 61-63 (USSR)

ABSTRACT: The article describes the activity of the Tiflis department of "Gidroenergoproyekt" on acceleration and cost reduction at some hydropower plant constructions. In the construction of the Ladzhanuri GES, cost reduction was obtained by changing a gravity dam (designed for a preliminary project) into a spillway arch dam (Fig 1). The arch dam will be equipped with various precision measuring instruments, to be investigated under various operational conditions; a small dissipation basin will be formed behind the dam by a low, three-hinged arch dam which will be used by the VNIIG, TNISGEI, and the Stroitel'nyy Institut (Building Institute) of the Georgian Academy of Sciences,

Card 1/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000514610008-6"

SOV/98-59-9-28/29

Some Results of Work on Cheaper and Faster Construction of Hydropower Plants

for scientific research. Experience with the Ladzhanuri arch dam will be useful for construction of some higher arch dam, such as the 240-m Inguri GES. Cost reduction at the Namakhvani-GES earth dam (Fig 2) was obtained by the use of local materials for its Construction;at the Dar'yal'skaya GES on the Terek River, cost reduction was obtained by many smaller changes in the project. At some hydropower plants significant cost reduction and acceleration of works were obtained by the use of prefabricated reinforced concrete parts (Ladzhanuri GES, Khram-GES II, Gumati-GES I, the Karabulakhskiy tunnel). There are 3 diagrams and 1 table.

Card 2/2

GEGELIYA, T.G., kand.tekhn.nauk; GVELESIANI, L., red.; DZOTSENIDZE, Sh., tekhred.

[Submerged intakes and buttress dams] Donnye i bychkovye vodozabornye plotiny. Tbilisi, Gos.izd-vo "Sabchota Sakartvelo," 1959. 125 p. (MIRA 13:7)
(Dams) (Hydraulic engineering)

DOLIDZE, David Yegorovich, prof. [1908-1960]; GEOKLIA, T.G., red.; KVARIANI, N.A., red.izd-va; TODUA, A.R., tekhred.

[Some problems of nonstationary viscous flow; method of potentials and integral equations] Nekotorye voprosy nestatsionarnogo techeniia viazkoi zhidkosti; metod potentsialov i integral'nykh uravnenii. Tbilisi, Izd-vo Akad.nauk Gruzinskoi SSR, 1960. 331 p. (MIRA 14:4)

(Hydrodynamics) (Potential, Theory of)
(Integral equations)

GEGELIYA, T.G., kand.tekhn.nauk; AMIREDZHIBI, I.A., inzh.

The Inguri Hydroelectric Power Station. Gidr. stroi. 32 no.12:4-8 D '61. (MIRA 15:2)
(Inguri Hydroelectric Power Station)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000514610008-6"

GEGELIA, T.G.

Boundary values of potential functions. Trudy Vych.tsentra AN Gruz.SSR 2:285-313 '62. (MIRA 16:1)
(Potential, Theory of) (Integrals, Generalized)

GEGELIYA, T.G.

Some fundamental three-dimensional boundary value problems in the theory of elasticity. Trudy Mat. inst. AN Gruz. SSR 28:53-72 '62. (MIRA 16:8)

(Boundary value problems) (Elasticity)

BASHELEYSHVILI, M.O.; BURCHUDADZE, T.V.; GEGELIYA, T.G. (Tbilisi)

"On some boundary problems of the theory of elasticity"

report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow 29 Jan - 5 Feb 1964.

190103

GEGELLO, A. I.

USSR/Archit 5708.
Leading Archt 7327.

Jan 1948

"Contribution of the Architects of the City of Lenin to Soviet Architecture," A. I. Gegello, Active Mem, Acad Archit USSR, 4 pp

"Arkh i Stroi" Vol III, No 1

Traces development of Soviet architecture in Leningrad, mentioning names of many outstanding architects of past 30 years and their contributions. Shows pictures of some of important or beautiful buildings in Leningrad.

190103

LC

GEGELLO, A.I.

Our creative tasks; from a speech by acting member of the Academy of Architecture, U.S.S.R., A.I.Gegello, at the all-city conference of architects of Leningrad. Arkhit.i stroi Len. no.1:43-46 '49.
(MLRA 7:5)

1. Deystvitel'nyy chlen Akademii arkhitektury SSSR.
(Leningrad--Architecture) (Architecture--Leningrad)

GEGEL'SKIY, I.N.

HEHEL'S'KYY, I.H.

Balsam fir in Chernigov Province. Bot.zhur.[Ukr.] 10 no.3:57-61 '53.
(MLRA 6:8)

1. Kyyivs'kyy lisohospodars'kyy instytut, kafedra dendrolohiyi.
(Chernigov Province--Balsam fir) (Balsam fir--Chernigov Province)

GEGEL'SKIY, I.N.

Landscape composition in the "Trostyanets" sylvan park. Biul.Glav.bot. sada no.20:62-72 '55. (MIRA 8:9)

1. Dendropark "Trostyanets". (Ukraine--Parks)

GEGEL'SKIY, I.N.

Landscape compositions in the Pervomayskaya Glade of the Trostyanets Park. Trudy Bot.sada AN URSR 5:133-146 '58.
(MIRA 12:2)

(Chernigov Province--Landscape architecture)

GEGENAVA, [redacted]

USSR/Pharmacology, Toxicology. Ganglioblocking Drugs U-4

Abs Jour : Ref Zhur - Biol., No 4, 1958, No 17589

Author : Gegenava

Inst : Institute of Clinical and Experimental Cardiology of the Academy of Sciences in Georgia.

Title : Materials to the Pharmacology of Diisopropylputrescine

Orig Pub : Tr. In-ta klinich. iexperim. cardiol. AN GruzSSR 1956 (1957) 4, 229-238

Abstract : In an acute experiment on dogs the effect of diisoprophl-putrescine (1) on the blood pressure (BP) was studied. 1 administered intravenously induced a fall in blood pressure by 30-40 mm in 3 hours. 1 administered orally in a 0.5-1 mg/kg dose decreased the blood pressure in 5-8 hours. The mechanism of the depressor action of 1 is of a central nature.

Card : 1/1

GEGEL'SKIY, I.N. [Hehel's'kyi, I.N.], inzh.lisovogo gospodarstva

An important ecological form of red oak. Visnyk sil'hosp.nauky 4 no.8:108-110 Ag '61. (MIRA 14:7)

1. Uchbova chastina Ukrains'koi akademii sil's'kogospodars'kikh nauk.

(Oak)

GEGEL'SKIY, I.N. [Hehel's'kyi, I.N.]

Investigating the root system of red oak under cultivation.
Trudy Bot. sada AN URSR 7:45-52 '60. (MIRA 14:4)
(Oak) (Roots (Botany))

BABAYAN, A.T.; GEGELYAN, Zh.G.; INDZHIKYAN, M.G.

Amines and ammonium compounds. Part 14: Alkaline cleavage of ammonium salts containing an alkoxymethyl group in the δ-position of the β,γ-unsaturated radical. Zhur. ob. khim. 31 no. 2:611-616 F '61. (MIRA 14:2)

1. Institut organicheskoy khimii AN ArmSSR.
(Ammonium compounds)

BABAYAN, A.T.; INDZHIKYAN, M.G.; GEGELYAN, Zh.G.

Amines and ammonium compounds. Part 19. Zhur.ob.khim. 33 no.7: 2177-2181 Jl '63. (MIRA 16:8)
(Amines) (Ammonium compounds)

BABAYAN, A.T.; INDZHIKYAN, M.G.; GEGELYAN, Zh.G.

Amines and ammonium compounds. Part 10: Alkali cleavage of ammonium salts containing an electron-acceptor group in the δ-position of the β,γ-unsaturated group. Zhur.ob.khim. 33 no.7:2181-2184 Jl '63. (MIRA 16:8)

(Ammonium compounds) (Alkalies)

BABAYAN, A.T.; INDZHIKYAN, M.G.; GEGELYAN, Zh.G.

Amines and ammonium compounds. Part 25: Alkaline decomposition of quaternary ammonium salts containing a tertiary butyl substituent in the δ-position of the β,γ-unsaturated group. Izv. AN Arm.SSR. Khim. nauki 18 no.1:25-31 '65. (MIRA 18:5)

1. Institut organicheskoy khimii AN Armyanskoy SSR.

[illegible], [illegible], [illegible]YAN, M.G.; [illegible]YAN, [illegible]

[illegible] and [illegible] compounds. [illegible] of quaternary ammonium salts containing [illegible] substituents. Izv. AN Arm. SSR. Khim. nauki 18 no.4:[illegible] [illegible]. (MIRA [illegible])

1. Institut organicheskoy khimii AN Armyanskoy SSR. Submitted July 21, 1964.

caused a fall in blood pressure by 90-100 mm in 24 hours. When 1 was administered daily in a 0.5-0.8 mg/kg dose for 5-6 days the blood pressure was decreased by 70-80 mm during 12-13 days. In dogs with renal hypertension 1 induced a decrease in blood pressure in a considerably smaller degree. 1 normalized the heightened reactions of the blood circulation apparatus in animals.

Card : 1/1

GEGENAVA, A. G.

[illegible] 1952. [2], 234 [illegible] 42 [illegible]
[illegible] 1953, 6.6.

Брегвадзе Ушанги Давидович. Состав газов минеральных вод Грузии. 1952. [2], 234 с., 42 л. (Груз. политехн. инст.)

Защ. 1953, 6.6.

816. [illegible] 1949. 103 [illegible]
[illegible] 1949, 4.3.

Буадзе Лили Поликарповна. К химическому исследованию ахалцихского угля в связи с вопросом генезиса. 1949. 103 с.

Защ. 1949, 4.3.

817. [illegible] 1951. 105 [illegible]
[illegible] 1952, 16.2.

Гегенава Алексей Георгиевич. К вопросу об ускоренном методе химического анализа бариевых руд. 1951. 105 с., илл.

Защ. 1952, 16.2.

818. [illegible] 1948. 84 [illegible]
[illegible] 1948, 10.10.

Гуцелидзе Алексей Павлович. Синтез β гамма-салициловой кислоты из β-гамма... (Тб. стоматол. инст.)

Защ. 1948, 10.10.

819. [illegible] 1938. 51 [illegible] 2. №1—2, 1941).
[illegible] 1939, 23.4.

Табберидзе Ислдор Давидович. Относительная устойчивость некоей получаемых гидрадизом отпавта марганца. 1938. 51 с. (Инст. химии АН Груз. ССР). (Сообщ. АН Груз. ССР, т. 2, №1—2, 1941)

Защ. 1939, 23.4.

820. [illegible] 1953. 103 [illegible]
[illegible] 1954.

Талаквадзе Герман Несторович. Исследование магния в минеральных и растительных объектах северной, северо-западной и северо-восточной районах Грузии.

Защ. 1954.

821. [illegible] 1948, 70 [illegible]
[illegible] 1949, 9.4.

Иасадзе Досифей Иванович. К вопросу интермолекулярного разложения нитратов... в водных растворах. 1948. 70 с., Тбл., илл.

Защ. 1949, 9.4.

822. [illegible] 1947. 77 [illegible] (ЖОХ, т. 18, в. 8, 1948).
[illegible] 1947, 18.10.

Ирцкидзе Нина Константиновна. Синтез и каталитическое гидрирование ацетиленовых гликолей. 1947. 77 с., диагр. (ЖОХ, т. 18, в. 8, 1948).

Защ. 1947, 18.10.

823. [illegible] 1939
[illegible] 1939, 17.3.

702

Dissertation for degree of

Candidate Chemical Sciences

Def. at
Tbilisi State U.

1. KARUMIDZE, S.A., NOVITSKAYA, T.N., GEGNAVA, G.V.

2. USSR (600)

7. "Concerning the Application of Some Combination Mixtures in Fruit Orchards" Trudy In-ta Zashchity Rasteniy AN Gruz. SSR (Works of the Institute of Plant Protection, Acad Sci Georgian SSR) Vol 7, 1950, pp 159-169.

9. Mikrobiologiya, Vol XXI, Issue 1, Moscow, Jan-Feb 1952, pp 121-132. Unclassified.

GEOBAIA, G.V.

Effect of extraneous factors on the stability of benzene hexachloride compounds [in Georgian with summary in Russian]. Trudy Inst. zashch, rast. AN Gruz. SSR 9:299-309 '53.
(Benzene hexachloride) (MLRA 8:2)

GEGENAVA, G.V.

Method of studying the stability and toxicity of insecticidal suspensions [in Georgian with summary in Russian].
Trudy Inst. zashch.rast. AN Gruz. SSR 9:311-319 '53.
(Georgia--Insecticides)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000514610008-6"

GEGENAVA, G. V.

The use of waste sulfite liquor as emulsifier for petroleum-oil emulsions. S. A. Karumidze and G. V. Gegenava (Inst. Plant Protection, Tiflis). *Soobshcheniya Akad. Nauk Gruzin. S.S.R.* 16, No. 1, 55-60(1955).—Waste sulfite liquor from paper manuf. can be used instead of soap as emulsifier for DDT emulsions with petroleum oil for agricultural use.

G. M. Kosolapoff

2

KIPIANI, R.Ya.; GOGEBAVA, G.V.

Tagged atom method of investigating the penetration of parathion into plants and the effect of external factors on its stability. Soob, AN Grus.SSR 16 no.7:557-564 '55. (MLRA 9:2)

1.Akademiya nauk Gruzinskoy SSR, Institut zashchity rasteniy, Tbilisi. Predstavleno deystvitel'nym chlenom Akademii L.A.Kanchaveli.
(Radioactive tracers) (Parathion) (Plants, Effect of insecticides on)

GEGEMAVA, G.V.

Simplified method of preparing DDT oil emulsions. Soob.AN Gruz. SSR 16 no.8:633-639 '55. (MLRA 9:5)

1. Akademiya nauk Gruzinskoy SSR, Institut zashchity rasteniy, Tbilisi. Predstavleno deystvitel'nym chlenom Akademii L.A. Kanchaveli.

(DDT (Insecticide))

GEGENAVA, G. V.

USSR /Chemical Technology. Chemical Products and Their Application I-27

Wood chemistry products. Cellulose and its manufacture. Paper.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 32694

Author : Gegenava G. V.

Inst : Institute of Plant Protection, Academy of Sciences Georgian SSR

Title : Study of "Sulfite Liquor" a Waste Product of Ingurskiy Cellulose and Paper Combine.

Orig Pub: Tr. In-ta zashchity rast. AN GruzSSR, 1956, 11,3-7

Abstract: Waste products of the above-stated combine are

Card 1/2

USSR /Chemical Technology. Chemical Products and Their Application

-27

Wood chemistry products. Cellulose and its manufacture. Paper.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 32694

similar, in their physico-chemical characteristics, to the waste of other analogous enterprises. It is demonstrated that concentrates of sulfite-alcohol vinasse possess emulsifying properties.

Card 2/2

GOGENAVA, G.V.

Mixture of sulfite pulp extract and lime used as ingredients for alkaloid insecticides. Soob.AN Grus. SSR 17 no.6:519-526 '56.
(MLRA 9:10)

1. Akademiya nauk Gruzinskoy SSR, Institut zashchity rasteniy, Tbilisi. Predstavleno akademikom L.A. Kanchaveli.
(Insecticides)

GEGENAVA, G.V.

Method of determining the comparative phytotoxicity of insectofungicides. Soob. AN Gruz. SSR 20 no.6:693-699 Je '58. (MIRA 11:10)

1. Gruzinskiy nauchno-issledovatel'skiy institut zashchity rasteniy, Tbilisi. Predstavleno akademikom L.A. Kanchaveli.
(Plants, effect of insecticides on) (Plants, Effect of fungicides on)

GEGENAVA, G.V.

10% concentrate of the oil emulsion of DDT. Zashch. rast. ot vred. i bol. 4 no.2:37 Mr-Ap '59. (MIRA 16:5)

(Georgia—Fruit—Diseases and pests)
(DDT (Insecticide))

GEGENAVA, G.V., kand.sel'skokhoz.nauk

Substitute for Bordeaux mixture. Zashch.rast.ot vred.i bol. 7 no.5:35-36 My '62. (MIRA 15:11)
(Fungicides)

GEGENAVA, G.N.

Seasonal tolerance of red spider to the sulfur-lime decoction.
Soob. AN Gruz. SSR 29 no.2:191-196 Ag '62.

(MIRA 18:3)

1. Institut zashchity rasteniy, Tbilisi. Submitted December 8, 1962.

GEGENAVA, G.V.; OTKHMEZURI, L.T.

Nature of the action of a combined mixture of petroleum oil and thiophos. Sobb. AN Gruz. SSR 30 no.5:637-644 My '63. (MIRA 16:11)

1. Institut zashchity rasteniy Gruzinskoy SSR, Tbilisi. Predstavleno akademikom L.A.Kanchaveli.

GEGENAVA, G.V., kand.sel'skokhoz.nauk

Ejection method of the preparation of emulsion. Zashch. rast. ot vred. i bol. 9 no.3:32-33 '64. (MIRA 17:4)

1. Gruzinskiy institut zashchity rasteniy, Tbilisi.

GEGENAVA, G.V.

Indices of the supposed effectiveness of persistent pesticides. Soob. AN Gruz. SSR 33 no. 2:429-435 F '64. (MIRA 17:9)

1. Gruzinskiy institut zashchity rasteniy, Tbilisi. Predstavleno akademikom L.A.Kanchaveli.

GEGENAVA, G.V.

Premises for the effectiveness and difficulties in the control of the whitefly Dialeurodes citri Ashm. Soob. AN Gruz. SSR 35 no.1:193-198 Jl '64. (MIRA 17:10)

1. Gruzinskiy institut zashchity rasteniy, Tbilisi. Predstavleno akademikom L.A. Kanchaveli.

[illegible]NOVA, [illegible]

Quantitative evaluation of the phytotoxicity of pesticides. Soob. AN Gruz. SSR 37 no.3:685-692 Mr '65. (MIRA 18:6)

1. Gruzinskiy institut zashchity rasteniy. Submitted September 15, 1964.

L 64445-65

ACCESSION NR: AP5016427 UR/0251/65/038/003/0651/0652

AUTHOR: Gegenava, G. V.; Nishnianidze, N. O.; Soinishvili, O. N.; Deisadze, T. A.

TITLE: Effect of chemical protective agents on growth and development of citrus plants and on the content of their fruits

SOURCE: AN GruzSSR. Soobshcheniya, v. 38, no. 3, 1965, 651-652

TOPIC TAGS: insecticide, fungicide, plant growth, horticulture

ABSTRACT: The article represents a brief resume of literature data and experiments on the effects of various organic fungicides (TMTD and zineb), insecticides and acaricides (petroleum oils, parathion, etc.) on citrus plants. As a result of the various chemical agents, vegetation starts 1 to 2 days earlier, flowering of plants starts 3 to 4 days earlier, and fruits mature 2 to 3 days earlier. Growth intensity of runners and fruits increases, fruit yields are almost doubled, and the quality of tangerines, oranges, and lemons is improved. However, there is found to be no difference between the experimental, standard, and control variants in respect to chemical

Card 1/2

L 64445-65

ACCESSION NR: AP5016427

analysis of fruit pulp and physical-chemical indices of the aromatic oils. Orig. art. has: None.

ASSOCIATION: None

SUBMITTED: 00 ENCL: 00 SUB CODE: LS

NR REF SOV: 003 OTHER: 000

llc

Card 2/2

GEGENAVA, G.V.; NISHNIANIDZE, N.O.; SEINISHVILI, O.N.; DEISADZE, T.A.

Effect of chemical plant protectors on the growth and development of citruses and the preservation of their fruits. Soob. AN Gruz. SSR 38 no.3:646-652 Je '65. (MIRA 18:12)

GOGELAVA, L.S., Cand Med Sci--(diss) "Effect of diisopropylputrescin upon the cardio-vascular system of normal and hypertensified animals." Tbilisi, Publishing House of the Acad Sci Georgian SSR, 1958. 13 pp (Tbilisi State Med Inst), 150 copies (KL,49-58, 126)

GVISHIANI, G.S.; ANDRIADZE, A.N.; GEGENAVA, L.S.

Effect of novocaine on the development of experimental athero-sclerosis. Soob.AN Gruz.SSR 23 no.4:473-476 O '59. (MIRA 13:5)

1. Akademiya Nauk Gruzinskoy SSR, Institut klinicheskoy i eksperimental'noy kardiologii im. M.D.TSinamdzgvrishvili, Tbilisi. Predstavleno chlenom-korrespondentom Akademii K.P.Chikovani.
(NOVOCAINE) (ARTERIOSCLEROSIS)

GEGENAVA, L.S.; CHKHIKVISHVILI, L.S.

Effect of some hydrazine derivatives of cobalt on coronary circulation. Trudy Inst. klin. i eksper. kard. AN Gruz. SSR 8:457-459 '63. (MIRA 17:7)

1. Institut kardiologii AN GruzSSR, Tbilisi.

GULYANITSKIY, B.S.; LIPKES, Ya.M.; GEGER, V.E.

Utilization of titanium waste products. (Review of foreign literature). TSvet.met. 29 no.4:88-94 Ap '56. (MLRA 9:8)
(Titanium--Metallurgy)

GEG R, V.YA.

GEGER', V.Ya., inzhener.

Pneumatic transportation of cinder and foam concrete mix. Stroi.i dor.mashinostr. 2 no.7:29-31 Jl '57. (MIRA 10:7)

(Light weight concrete)

GEGER', V.Ya. Cand Tech Sci -- (diss) "Development of a Technology for ~~Production~~ the manufacture of Large-Sized ~~Stone Members~~ sthenic elements from Foamy Cement on the Basis of ~~Team~~ waste Ashes from Leningrad Electric Power Stations". Len, 1958. 14 ~~pages~~ pp. (Ministry of Higher Educ USSR. Len Order of ~~kmmt~~ Labor Red Banner Eng-Const Inst). 110 pages (KL, 10-58, 120).

- 24 -

GEGER, Ye. I.

"Agricultural Technique of Growing Birch Seedlings in the Watershed Rayons of the Alma-Atinskaya Oblast." Cand Agr Sci, Kazakh Agricultural Inst, Alma-Ata, 1953. (RZhBiol, No 5, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SO: Sum. No.521, 2 Jun 55

GEGERMAN, F. A.

KHIZNIAK, P. A., YAKOVLEVA, V. I., and GEGERMEN, F. A. "Development of Potato Canker Infection Under Natural Conditions," Sad i Ogorod, no. 7, 1948, pp. 66-69 20 Sa13

So: Sira Sl-19-53, 15 Dec 1953

GEGESHIDZE, G.A.

[redacted]

[Socialist Tiflis] [Sotsialisticheskii Tbilisi] 1958. 26 p. (Obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii Gruzinskoi SSR. Ser.1) [In Georgian]. (MIRA 12:2)

(Tiflis)

GEGESHIDZE, Georgiy Andreyevich; MIKELADZE, I.S., red.; KHUTSISHVILI, I., tekhn.red.

[Specialization and cooperation in the electrical equipment industry of Georgian SSR] Spetsializatsiia i kooperirovanie v elektrotekhnicheskoi promyshlennosti Gruzinskoi SSR. Tbilisi, Gos.izd-vo "Sabchota Sakartvelo," 1959. 117 p. (MIRA 13:4)
(Georgia--Electric machinery industry)

GEGESHIDZE, G.A.; TKESHELASHVILI, G.K., red.; NATISHVILI, A.G., red.izd-va; GIORGADZE, O.N., red.izd-va; TOLJA, A.R., tekhn.red.

[Continuous and automatic lines in some enterprises of the electric machinery industry in Georgia] Potochnye i avtomaticheskie linii na nekotorykh predpriiatiiakh elektromashinostroitel'noi promyshlennosti Gruzinskoi SSR. Tbilisi, Izd-vo Akad. nauk Gruzinskoi SSR, 1960. 162 p. (MIRA 15:5)
(Georgia—Electric machinery) (Automation)

GEGESHIDZE, G.; GABASHVILI, N., prof., red.; KHUTSISHVILI, V., tekhred.

[Development of the manufacture of instruments and creation of new means of automation in the Georgian S.S.R.] Voprosy razvitiia priborostroeniia i sozdaniia novykh sredstv avtomatizatsii v Gruzinskoi SSR. Tbilisi, Gos.izd-vo "Sabchota Sakartvelo," 1960. 216 p. (MIRA 14:3)
(Automatic control) (Georgia--Instrument industry)

PHASE I BOOK EXPLOITATION SOV/5170

Gegeshidze, G. A.

Voprosy razvitiya priborostroyeniya i sozdaniya novykh sredstv avtomatizatsii v Gruzinskoy SSR (Problems in the Development of Instrument Making and the Creation of New Means of Automation in the Georgian SSR) Tbilisi, Gos. izd-vo "Sabchota Sakartvelo", 1960. 216 p.

Ed.: N. Gabashvili, Professor; Tech. Ed.: V. Khutsishvili.

PURPOSE: This book is intended for technical personnel in general, especially those employed at planning and design offices, and plant engineers.

COVERAGE: The book discusses problems of the instrument-making industry in the Georgian SSR. Problems of organization and structure of scientific research institutes, design offices, and industrial enterprises in this field are discussed. The development of means of automation and prospects of the automation of

~~Card 1/6~~

industrial processes in the Georgian SSR are reviewed. No personalities are mentioned. There are 23 references, all Soviet.

TABLE OF CONTENTS:

GEGESHIDZE, G.A.

Electronic devices for counting the output of parts and items in machinery manufacture. Soob.AN Gruz.SSR 25 no.5:565-570 N '60. (MIRA 14:1)

1. Predstavleno akademikom R.R. Dvali.
(Counting devices)

GEGESHIDZE, G.A.

Automatic line for machining collector plates. Mashinostroitel' no.3:3-6 Mr '61. (MIRA 14:3)

(Automation)